

Plastics-to-fuel facilities harm Colorado's communities and stifle our circular economy.

Our taxpayer dollars go in and hazardous waste and air pollution come out.

# **Background / The Problem**

Across the US, environmental regulations are being slashed to allow the conversion of waste and plastics into fuel.<sup>1</sup> Plastics-to-fuel processes, including pyrolysis and gasification, are harmful, false solutions to managing waste that only worsen the climate crisis and perpetuate natural resource extraction.<sup>2</sup> More than \$700 million in federal and state subsidies have been spent on these dirty, unproven technologies in other states, but most of these facilities have failed to process plastics at their rated capacity and several have recently closed.<sup>3</sup>

# Why should we not publicly fund or incentivize plastics-to-fuel processes?

- 1. Harmful Impacts to Human Health: Plastics-to-fuel processes use and produce hazardous chemicals and generate hazardous waste. Toxic pollutants and hazardous wastes from plastics-to-fuel facilities include dioxins, arsenic, mercury, and benzene, among many others. These toxins are correlated with health impacts, including cancers, neurological disorders, heart problems, and reproductive, immune, and respiratory disorders.
- 2. Disproportionate Pollution in Vulnerable Communities: Nearly 80% of facilities that incinerate Municipal Solid Waste, including plastics-to-fuel facilities, are located in low-income and BIPOC communities. 6 Colorado should not fund or support processes that put fenceline communities at risk.
- **3. Disrupting Colorado's Circular Economy:** Plastics-to-fuel processes destroy the value of extracted natural resources that could otherwise be conserved or recycled back into the supply chain. These practices perpetuate the need to continuously extract natural resources to feed plastics-to-fuel facilities, consuming valuable materials that could otherwise be recycled or reduced altogether.
- **4. Never Worth the Costs:** Plastics-to-fuel projects are expensive approaches to waste management that nearly always rely on government investment of taxpayer dollars and/or tax incentives to build.<sup>7</sup>



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## What are plastics-to-fuel processes?

Sometimes greenwashed under the guise of "chemical," "advanced," or "molecular" recycling, the energy-intensive plastics-conversion processes—
pyrolysis³ and gasification—are not worth the high environmental and economic costs. Only a very small percentage of plastics that go through these processes are actually recycled, and most of the outputs are used to create low-grade fuels.9 These processes are regulated as "other solid waste incineration" under the Clean Air Act.¹0 A report from the National Renewable Energy Lab (NREL) and the Department of Energy last year found the economic and environmental costs of turning old plastic into new using pyrolysis to be 10 to 100 times higher than those of making new plastics from fossil fuels. ¹¹¹

# What's happening in Colorado

Plastics-to-fuel projects are currently being proposed in several parts of our state, including Weld and Larimer Counties. Proposals advocating for these false

solutions demand significant time and resources from local and state governments, which could be better invested in real Zero Waste solutions that truly benefit our community, environment, and climate. <u>Senate Bill 24-150</u> will eliminate state subsidies and incentives for these technologies that threaten the health and environment of our communities.

## THE SOLUTION

Colorado should stop subsidizing and incentivizing risky and polluting plastics-to-fuel projects. Instead, public funds should support real solutions that reduce plastic pollution.

#### SB 24-150 will:

- Make plastics-to-fuel processes ineligible for state grants, loans, tax credits, tax exemptions, subsidies, or other financial incentives.
- Require pyrolysis and gasification processes to be regulated and permitted as solid waste-toenergy incineration facilities, ensuring they are required to meet Clean Air Act regulations.
- Make pyrolysis of Municipal Solid Waste ineligible as an energy resource in the state renewable energy standard.
- Make methane derived from pyrolysis of Municipal Solid Waste ineligible from being counted as recovered methane in clean heat plans.

**Vote YES on SB 24-150** • Sign up for legislative updates and action alerts at <a href="https://bit.ly/2024-ZW-Policy">bit.ly/2024-ZW-Policy</a>

- 1 "Loopholes, Injustice, & the 'Advanced Recycling' Myth." (Just Zero, 2022).
- 2 "Chemical Recycling: A Dangerous Deception." (Beyond Plastics, 2023); "Waste incinerators undermine clean energy goals." (PLOS Climate, 2023).

  3 Ibid
- 4 "No plastics panacea: chemical recycling causes pollution, promotes waste." (Oil and Gas Watch, 2022); "Pollution and Health Impacts of Waste-to-Energy Incineration." (GAIA, 2019).
- 5 Ibid
- 6 "Q&A: Addressing the Environmental Justice Implications of Waste." (Environmental and Energy Study Institute, 2021); "Pollution and Health Impacts of Waste-to-Energy Incineration." (GAIA, 2019); "Nearly 80% of US incinerators located in marginalized communities, report reveals." (Waste Dive, 2019).
- 7 "<u>Plastic-To-Fuel: A Losing Proposition</u>." (GAIA, 2022); "<u>The False Promise of Plastics-to-Fuel Technologies</u>." (AMBR, 2022).
- 8 An important exception to note is that pyrolysis is useful when applied to organic matter to create carbon-negative biochar. Learn more about biochar at <a href="mailto:ecocycle.org/biochar">ecocycle.org/biochar</a>.
- 9 "Chemical Recycling' Is Not Recycling: The Plastic Industry Is Greenwashing Incineration." (NRDC, 2022).
- 10 "Other Solid Waste Incinerators (OSWI): New Source Performance Standards (NSPS) and Emission Guidelines (EG) for Existing Sources." (US EPA).
- 11 "Technical, Economic, and Environmental Comparison of Closed-Loop Recycling Technologies for Common Plastics." (National Renewable Energy Lab. 2023)